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6

MORAL DISENGAGEMENT DURING EXPOSURE TO MEDIA VIOLENCE

Would It Feel Right to Shoot an Innocent Civilian in a Video Game?

Tilo Hartmann

People are frequently irritated by the amount and intensity of virtual violence that many video gamers commonly engage in and enjoy. On the contrary, most players do not seem to be morally concerned or irritated about their shooting of virtual representations of other social beings. Based on the discussion of virtual violence in various disciplines (e.g., in Communication Science, Media Psychology, and Philosophy; see Hartmann & Vorderer, 2010; Luck, 2009; McCormick, 2001; Raney, 2004; Young & Whitty, in press), the chapter provides an approach that may explain why many users, while playing, judge virtual violence to be morally sound and why they do not feel bad about engaging in virtual violence. The present approach rejects the idea that it would be the genuine artificiality of the game representation alone that explains why players do not feel bad about virtual violence. Based on the outline of a dual-process approach to media reality, it is argued that most contemporary video games may feel apparently real to the players' senses and, thus, may provide intense illusions of violence. Accordingly, while playing video games, most players may feel as if the ongoing action was quite real and morally significant. However, despite this feeling, players may not feel bad about their violent actions, because (a) of their personality, (b) parallel rational processing juxtaposes their feeling of an apparent reality, (c) they perceive the violence as "part of a game," and (d) moral disengagement cues frame the violence as justified, clean, and appropriate (Bandura, 2004).

The present approach originated from research on violence depicted in video games. However, most of the presented ideas may be adapted to other media settings as well, particularly to violence depicted in television and movies. Accordingly, although the present chapter primarily builds on video game research, the presented ideas will also be linked to related research on users' moral judgment, and acceptance and enjoyment of violence depicted in television or movies (e.g., Raney, 2004, 2005; Zillmann, 2000).

A Dual-Process Perspective on Media Realism

A common argument of avid video game users is that they do not perceive the virtual violence to be morally significant, because, while playing, they were constantly aware that "this is not real" (Klimmt, Schmid, Nosper, Hartmann, & Vorderer, 2006; Soto, Hartmann, & Prins, 2010). Indeed, video game characters are not living beings, but only representations of living beings. They are neither social entities worthy of proper moral treatment, nor can they actually be harmed (Luck, 2009). Consequently, in an objective or strict rational point of view, media violence, including the representation of violence in video games, is not morally significant in that it does not involve any real harm-doing (except for potential harmful effects on the user or observer; see Hartmann, 2011a; Luck, 2009; Young & Whitty, in press). If users are indeed constantly aware of this fact, as their claim "I know it is not real" suggests, and if "knowing that this is not real" is sufficient to strip off any moral significance from virtual violence, then it should be clear how users morally perceive and judge virtual violence while playing: They would perceive it as something artificial, and they would not judge it to be morally significant. Such an argument, in turn, may also plausibly explain why users tend not to feel bad about virtual violence.

However, the complete story about how users perceive virtual violence may be more complicated than this. In the following, I will argue that two types of reality perceptions need to be distinguished: What users know is real needs to be distinguished from what they feel is real (see for a similar idea Schubert, 2009; Shapiro, Peña-Herborn, & Hancock, 2006). I am going to argue that video game users may feel that the portrayed violence is real, albeit knowing that it is not. Furthermore, I will argue that in the heat of the video game-play the feeling of an apparent reality may often dominate the knowledge that the depicted violence is not real. Accordingly, because they may be prone to feel that the depicted violence is really happening, virtual violence may be more morally significant to users than their claim "I know it is not real" initially suggests.

Communication scientists (and researchers in related disciplines) have long pointed out that users may approach media either in an involved or in a critically analytic and more distanced reception mode (Cupchick, 2002, 2011; Vorderer, 1993). While using media in an involved mode, users presumably are closely attached psychologically to the depicted action (Cupchick, 2002) and tend to forget about the mediated origin of the representations they encounter (sometimes referred to as "presence" or the illusion of non-mediation; Tamborini & Skalski, 2006; see also Lombard & Ditton, 1997), start to think "within the narrative" depicted by a media offering (sometimes referred to as transportation; Green & Brock, 2000), and temporarily tend to feel that the things they see and hear are real. In contrast, while using media in a critically analytic mode, users presumably become psychologically detached from the depicted action, tend to be aware of the mediated nature of the shown representations, and start to think about the media

representation as a media representation, thus rejecting the implicit offer to temporarily believe in the illusion.

Two Processing Systems

This idea of two mutually exclusive modes of reception (i.e., an involved versus a critically analytic reception mode) may be replaced by the more accurate idea that users process media content based on two distinct information processing systems that operate in parallel during exposure. The idea of two distinct processing modes has been expressed and empirically substantiated in various psychological dual-process theories, particularly in the distinction of experiential versus rational processing laid out in cognitive experiential self-theory (e.g., Epstein & Pacini, 1999), system 1 versus system 2 processing (e.g., Stanovich & West, 2000), rule-based versus associative processing (Sloman, 2002; Smith & DeCoster, 2000), or reflective versus impulsive processing (Deutsch & Strack, 2006). Interestingly, this distinction has also been recently echoed by moral psychologists arguing that individuals may form intuitive versus reasoned moral judgments (e.g., Haidt, 2001).

In line with the idea of two modes of information processing, Hartmann (in press) suggests that users may cognitively process media both within their rational or experiential processing system (see also Berger, 2007; Lee, 2010a, 2010b; Shapiro & Lang, 1991).[1] According to Epstein and Pacini (1999), the rational system is a relatively recent evolutionary adaptation. It allows for deliberate analytical processing and is capable of high levels of abstraction. In contrast to the quick processing of the experiential system, the rational system operates rather slowly, primarily by representing and editing concepts in the medium of language, and by applying logical rules and inferences. Within the rational system, truth is established as a belief or knowledge (people believe or know that something is real or not) of whether things seem plausible, logical, or likely (this type of realism has been almost exclusively addressed in "perceived media realism" research; e.g., Potter, 1988). For example, based on rational processing, users may find it unlikely that an alien in a video game would actually stand in front of them in their living room. Accordingly, they would not believe that this event was really happening (Shapiro, 2008).

The evolutionarily much older experiential system, in contrast, operates on associative rather than logical connections. The automatic processing of the experiential system works quickly, effortlessly, and often unconsciously (see Bargh, 1994). Because it is effortless and occurs without volitional control, experiential processing represents the default mode of processing. Because it is quicker, it usually precedes rational processing (Epstein & Pacini, 1999). While encoding reality, the experiential system alludes to images, metaphors, and narratives. Incoming stimulus patterns are associated with the sensory patterns of memorized concepts (Smith & DeCoster, 2000); sufficiently associated stimulus patterns lead to recognition of a concept. Accordingly, truth

is established if something appears "real to the senses," because it sufficiently mimics the sensory pattern typically associated with a concept, object, or entity (this type of perceived realism lies at the heart of presence research, e.g., Tamborini & Skalski, 2006; is covered in research on perceptual illusions, e.g., Burton, 1999; and has already been addressed in Schlegel's theory of dramatic illusion; see Burwick, 1991).[2] Furthermore, the experiential system is closely tied to intuitions and gut feelings. For example, a naturally displayed computer-generated agent or spatial scenery may intuitively "feel real" to users (Schubert, 2009). Accordingly, they may feel like sharing a social situation with the media character (Lee, 2010a), or they may intuitively "feel like being present" in the space depicted by a media environment (Schubert, 2009; Slater, 2009; Wirth et al., 2007). In general, based on experiential processing, users may feel like depicted entities are "really, currently existing" and the depicted action is "really, currently happening."[3]

Parallel Processing

Both the rational and experiential system may operate in parallel when users process a media representation. For example, based on experiential processing, a media character that is naturally displayed in a video game may feel real to users (and, thus, they may intuitively feel as if they are encountering another living being). At the same time, however, they may know, based on rational processing, that the encounter is not really happening, as they think it is highly unlikely that the depicted character was indeed, in that moment, present in their living room. Accordingly, users may feel that a media representation is real (and they may tend to respond to it as such), while simultaneously knowing that it is not. This may explain several paradoxical user responses that have been reported in the literature. For example, when in a virtual reality environment, many users refrained from walking across the edge of a steep virtual cliff, even though they knew that it was just a virtual environment (Slater, 2009). In a study by Hartmann, Toz, and Brandon (2010; see also Lin, 2010, 2011), users of a video game felt guilty when shooting virtual characters for unjustified reasons, although this reaction seemed inappropriate from a strict rational perspective. Similarly, in a virtual replication of the famous Milgram experiment by Slater et al. (2006), participants reported that they felt like they were inflicting pain on a virtual character, despite simultaneously knowing that this was impossible. Taken as whole, these findings suggest that users may feel that media representations were real, albeit knowing that they are not. In the light of the present perspective, these findings may be interpreted as showing that users derive media realism judgments based on parallel experiential processing (as a feeling) and rational processing (as a belief or knowledge; Schubert, 2009).

Dominance of the Experiential System

However, several reasons suggest that users, while playing, primarily process the game in an experiential mode rather than a rational mode. First,

experiential processing is less effortful than rational processing. Accordingly, it is the standard processing mode in everyday life (Epstein & Pacini, 1999). In addition, it tends to precede rational processing. Therefore, in an exposure situation, accurate media depictions of spaces or social agents may quickly induce a feeling of apparent reality that can only be regulated or discarded upon more effortful and slower rational processing. In line with this thinking, Zillmann (2006, p. 218) suggests that "the sequence of events, therefore, is not that cognizance of the pseudo-reality of presentations has to be suppressed before emotions can occur, but that emotions are first induced by apparent reality, which then may be discounted as artificial." Similarly, Shapiro and Lang (1991, p. 689) also argue that "at a micro level, a person responds to every stimulus as if it were real, at least momentarily." Second, entertaining media content, and video games in particular, is often arousing and fast-paced. Processing of such media content demands cognitive resources (Shapiro et al., 2006). However, both arousal and a higher cognitive load are supposed to shift the processing of information towards the experiential system (Epstein, 1994; Epstein & Pacini, 1999). Third, next to these cognitive reasons, users may be motivated to process a video game primarily within their experiential system. Processing the game within the rational system may result in psychological detachment and undermine users' entertainment experience. Accordingly, users may be motivated not to interfere in the automatically operating experiential processing, because this may diminish the illusion of an apparent reality that has been shown to foster enjoyment (Skalski, Tamborini, Shelton, Buncher, & Lindmark, 2011). Taken together, and in contrast to what avid gamers often claim, this would suggest that the experiential mode dominates over rational processing during video game play (Hartmann, in press).

The Moral Significance of Virtual Violence

The introduced dual-process perspective on media realism suggests that users, while playing a video game, are not constantly and fully aware of the mediated nature of depicted sceneries, people, objects, and events. Rather, if they primarily process the game in their experiential system, users may partly subdue to the media illusion and may feel that the things portrayed in a video game are real. Adapted to virtual violence, this may imply that users do not perceive video game characters as "pixels on the screen," but partly perceive video game characters as existing social beings that follow their own mind, feel emotions, and possess a unique personality (Tamborini & Skalski, 2006). However, as Waytz, Cacioppo, and Epley (2010) state, "perceiving an agent to have a mind means that agent is capable of conscious experience and should therefore be treated as a moral agent worthy of care and concern" (p. 222). Accordingly, as a consequence of their tendency to anthropomorphize video game characters, users may also tend to intuitively perceive these characters as moral beings that deserve proper moral treatment.

From this perspective, virtual violence against computer-generated characters resembled morally significant action, not because of potential harmful effects on (really existing) users, but because users may tend to feel like inflicting harm upon apparently existing living beings (Hartmann, in press a). Although this assumption warrants further empirical testing, it is in line with various studies that show that users automatically feel empathy with virtual characters (Morrison & Ziemke, 2005), tend to perceive computers and computer-generated characters as social and even moral beings (Nass & Moon, 2000), may feel guilty about shooting innocent video game characters (Hartmann et al., 2010; Klimmt et al., 2006; Lin, 2010, 2011; Soto et al., 2010), and think that moral taboos exist even in completely virtual worlds (Whitty, Young, & Goodings, 2011). All of these observations show that users do not perceive virtual characters as artificial media representations (as one would expect if they indeed processed media only in their rational system), but rather tend to treat them as social and even moral beings (as one would expect if they primarily processed media in their experiential system).

Virtual Violence: Why Do Users Not Feel Repelled By It?

If video game users are indeed prone to process the depicted violence experientially, and, as a consequence, tend to get a feeling that the depicted violence was really happening, why do most users still enjoy this type of violence rather than feel repelled by it? This is not an easy question. First, it is important to clarify what "being repelled by violence" implies. In general, it may be argued that responses to violence can be positioned on a continuum between aversion and attraction. On an affective level, aversion is reflected by noxious moral emotions like disgust or guilt (Tangney, Stuewik, & Mashek, 2007; Young & Whitty, in press). Taken together, such aversive responses represent the extent to which an individual feels repelled by virtual violence. Accordingly, the question becomes why video game users do not feel guilty or morally disgusted about their seemingly real violent actions.

However, virtual violence may simultaneously trigger positive responses, too. For example, people may feel powerful and competent if they "successfully" harmed others (Przybylski, Ryan, & Rigby, 2009). It is possible that users experience parallel feelings of competence and guilt. So how do these feelings affect the overall enjoyment of virtual violence? In general, it is helpful to distinguish responses that either impede or contribute to the enjoyment of virtual violence (see also Hartmann & Vorderer, 2010; Tamborini, 1991). This logic implies the idea of a certain baseline of enjoyment or a "neutral state." Impeding responses would push enjoyment below the baseline, but, if they do not occur, enjoyment would raise to baseline again. However, the absence of impeding responses would not push enjoyment higher than baseline. In this sense, the absence of impeding responses is a necessary but not sufficient cause of enjoyment. Contributing responses, in contrast, would

push enjoyment above baseline. If they are not occurring, enjoyment would drop to baseline again (but not lower than that).

Virtual violence may trigger responses that both impede and contribute to enjoyment simultaneously. For example, virtual violence may trigger feelings of competence as a response that contributes to enjoyment, but also feelings of guilt that impede enjoyment (Hartmann & Vorderer, 2010). If both types of responses are equally intense, they may balance each other out and, thus, suppress the formation of enjoyment. If users' impeding responses outweigh their contributing responses to virtual violence, they are unlikely to enjoy it; vice versa, if positive contributing responses outweigh impeding responses, they are likely to enjoy it. Careful mediation analyses may allow for the disentanglement of these underlying mechanisms of users' enjoyment of virtual violence in future studies. The question that is most relevant to the present approach is, why and when do users not feel repelled by virtual violence? What mechanisms diminish responses that likely impede enjoyment, particularly guilt, when users engage in seemingly real virtual violence? Four answers to this question will be discussed in the next section of the present chapter. Users may not feel repelled by seemingly real violence, (a) because of their personality, (b) because they know that it is not real (although it feels real), (c) because they perceive it as part of a game, and (d) because moral-disengagement cues frame the violent action as morally acceptable. These factors may jointly explain why users do not feel repelled by virtual violence.

Personality Traits

Some people feel less repelled by violence than others, and some engage more readily in violence than others when the violence takes place in the real world. It is plausible that the same people also feel less repelled than others when engaging in seemingly real virtual violence. Research has shown that males engage more readily in physical violence in the real world than females (Archer, 2004). Males feel more attracted by real-world violence than females. Similarly, males have been shown to be more attracted by virtual violence than females and to play violent games more frequently than females (Lemmens & Bushman, 2006). This may suggest that male users experience fewer responses that impede enjoyment when engaging in virtual violence. In an experiment by Lin (2010), females enjoyed a violence-free video game more than a violent game featuring a good or a bad guy as a protagonist; males, however, enjoyed the violent video game with the bad guy most, and more so than the violence-free game. In the same study, females also felt guiltier than males when playing the bad guy in the violent video game.

Research revealed that individuals that also engage in real-world violence more frequently are more aggressive and less empathetic than others (Archer, 2004). The same personality traits have been found to underlie selective exposure to virtual violence (Lemmens & Bushman, 2006). In addition, in two experimental studies reported by Hartmann et al. (2010), participants

that scored lower on trait empathy felt less guilty about shooting virtual characters in unjustified or inappropriate contexts than participants that scored higher on trait empathy. Furthermore, a study by Ryan and Connell (1989) suggests that individuals who internalized prosocial norms more deeply than others are less prone to engage in interpersonal violence. Similarly, in two unpublished studies, Hartmann (2011b) found that strong internalizations of prosocial norms were related to lower exposure to violent video games and lower enjoyment of virtual violence, whereas weaker levels of prosocial norm internalization were unrelated. Taken together, these findings support the argument that users may not feel repelled by seemingly real virtual violence because of their personality. The reviewed findings suggest that some individuals may even feel attracted to both real and virtual violence.

Knowing That the Violence "Is Not Really Happening"

Another plausible reason why users may not feel repelled by seemingly real virtual violence is that they always keep in mind that the ongoing action is, in fact, not really happening. Even if experiential processing resembled the primary way of processing video game content, as suggested above, users may engage in parallel rational processing and, thus, rationalize their feeling of an apparent reality. Although empirical evidence is lacking, it seems plausible that rational processing of violent video game content leads to an increased awareness that the represented violence is not "really and actually happening" even if it felt so. Accordingly, even if users primarily engaged in experiential processing, parallel rational processing may keep the information that "this is not real" salient. For example, while engaging in virtual violence, probably no video game user really believes that s/he is killing existing living beings, although many users may have a feeling like they are. Consequently, while playing, video game users may enter a paradoxical state in which the depicted violence feels real although they know that it is not. The knowledge that "this is not really happening" may provide a cognitive basis to accept violent behavior most users would probably deem inacceptable if conducted in real life (like shooting real soldiers). Accordingly, believing that "this is not real" may diminish moral concern and related moral feelings. This assumption may also partly explain why many users engage in virtual violence without experiencing any of the serious symptoms reported by soldiers that engaged in real combat scenarios, like intense fear, strong feelings of guilt and remorse, or traumatization (Henning & Frueh, 1997). Video game users may particularly engage in rational processing and activate the knowledge that "this is not really happening" in situations where they seek to regulate noxious moral feelings and wish to distance themselves from the ongoing violent action (e.g., Hartmann & Vorderer, 2010; Klimmt et al., 2006). Similar ways to regulate noxious emotions have been observed in the context of horror movies (Hoffner & Levine, 2007). Taken together, it may be argued that rational processing increases the

salience of the knowledge that "this is not real," which, in turn, diminishes moral concern that otherwise may impede game enjoyment.

Considering the Violence a "Part of the Game"

Video game users may also not feel repelled when engaging in seemingly real violence because they perceive it as "part of a game." Bredemeier and Shields (n.d.) observed in the context of sports that morality in some important ways is "'bracketed' off from everyday life." They found that sports allow for a greater degree of moral freedom than everyday life situations. "Many actions that may be seen as totally illegitimate in everyday life—such as inflicting pain on another human being—may be accepted and even embraced as a routine part of some sports" (Bredemeier & Shields, n.d.). Boxing provides a good example. In boxing, it is morally accepted by both athletes and even desirable to punch the face of the other person. According to Bredemeier and Shields (1986), the personality of the athletes is not the reason why such violent behavior is deemed acceptable, however. Rather, the sport context alters the way athletes think and feel about moral issues. Game rules that designate which actions are appropriate and which are not represent one of the main reasons of this transformed morality. As a consequence, athletes tend to depersonalize opponents and to re-frame violent behavior as instrumentally necessary: "You don't think about hurting someone—you just think about getting position or getting the ball" (quote from Bredemeier & Shields, 1986, p. 264).

Bredemeier and Shields (n.d., 1986) argue that their approach applies to any competitive game setting. Indeed, their approach bears striking similarities to video games. In video games as well, many actions are deemed appropriate that would be considered illegitimate in everyday situations. It may be argued that violent video game action, in close resemblance to boxing or even more violent sports, is typically embedded within a set of game rules, according to which the harming or even killing of others falls within the boundaries of morally legitimate action (Powers, 2003). Accordingly, even if violent actions felt real to users, they may accept most of them as fair because they do not violate the rules of the game. Accordingly, users would not feel bad about their seemingly real violent behavior. In line with this assumption, in an experimental study on virtual violence, Hartmann and Vorderer (2010, Study 2) observed a significant negative correlation between the extent participants were aware that "this is just a game" and their level of guilt and negative affect. Furthermore, just like in sports, the game context may influence users in re-framing their violent action as instrumentally necessary behavior. This should be indicated in the way users talk about their engagement in violent video games. Indeed, in close resemblance to the quote of an athlete cited above, in an interview study among users of violent video games (Klimmt et al., 2006, p. 318), users reported that "you only try to move the crosshair to the position where the bullets

should hit. You can only focus on dexterity—that has got nothing to do with killing."

Considering the Violence a Justified Action: The Effect of Moral Disengagement Cues

Another reason why most video game users may feel barely troubled by seemingly real violent action is that they are morally disengaged. According to Bandura, Barbaranelli, Caprara, and Pastorelli (1996), individuals normally engage in self-sanctioning if they violate a personally relevant standard or norm. For example, if users believe in pro-social norms but feel like they harmed another individual, they will feel bad or guilty about it. However, if morally disengaged, self-sanctions become disentangled from detrimental behavior. Accordingly, morally disengaged people may engage in violent behavior without feelings of guilt, remorse, or regret that normally follow such behavior. Bandura et al. (1996) show that some individuals (e.g., boys) are more prone to morally disengage than others. However, according to the theoretical approach, particularly contextual or situational cues trigger moral disengagement. Accordingly, Bandura (2004, p. 39) recalls that "indeed, large-scale inhumanities are typically perpetrated by people who, in other areas of their lives, can be quite considerate and compassionate." The theoretical approach distinguishes eight contextual moral disengagement cues. More specifically, Bandura et al. (1996, p. 364) argue that moral self-sanctions can be disengaged from harmful conduct by reframing harmful acts as moral ones through linkage to worthy purposes ("moral justification"), obscuring personal causal agency by diffusion and displacement of responsibility, misrepresenting or disregarding the injurious effects inflicted on others, and vilifying the recipients of maltreatment by blaming and dehumanizing them.

The same moral disengagement cues may also be embedded in many violent video games and, thus, may effectively disentangle users' seemingly real violent behavior from self-sanctions (Hartmann & Vorderer, 2010; Hartmann et al., 2010; Hartmann, in press b; Klimmt et al., 2006; Lin, 2010, 2011). Although systematic content-analyses of moral disengagement cues in violent video games are lacking to date, justification of violence and a distorted portrayal of consequences seem to be among the more common cues embedded in violent games. For example, many contemporary first-person shooters follow the narrative that a hero has to save the world from evil opponents or, in general, needs to restore justice. The suffering of victims, however, is barely portrayed in all its dimensions and details. In line with this assumption, 77 percent of all analyzed video games rated for mature audiences in a content-analysis by Smith, Lachlan, and Tamborini (2003) included justified acts of virtual violence (i.e., "violent interaction that was motivated by protection of life, protection of property, or retaliation," p. 63). In addition, over half of all analyzed violent interactions featured unrealistically low levels of harm or pain to the victim.

These and other moral disengagement cues may free video game users from guilt and moral concern, even if they would feel as if the virtual violence was actually happening. In two experimental studies, Hartmann and Vorderer (2010) provided preliminary evidence for this assumption. In a first experiment, users who shot opponents in a video game that initially displayed a severe and condemnable misconduct felt less guilty, ashamed, nervous, and irritable than users who shot opponents that initially displayed only a minor misconduct. In a second experiment, users who shot virtual opponents for a justified reason felt less guilty and reported less negative affect than users who shot virtual opponents for an unjustified reason (see also Lin, 2010, 2011). In another experiment by Hartmann et al. (2010, Study 2), users who shot anonymous virtual opponents felt less guilty than users who shot virtual opponents whose social background (private living conditions, preferences, etc.) they learnt about prior to the game. Taken together, these findings provide preliminary evidence that cues embedded in the narrative and game-play of a video game morally disengage users and diminish self-sanctions like guilt or negative affect.

However, the notion that moral disengagement cues diminish users' moral concern when engaging in *seemingly real violence* has not been tested to date. Future studies need to investigate these effects of moral disengagement cues in combination with users' experientially and rationally derived realism judgments. It seems plausible, for example, that the guilt-reducing effect of moral disengagement cues is stronger if users—both as a result of their experiential and rational processing—experience the virtual violence as highly realistic. In general, it may be argued that the effect of moral disengagement cues may also be substituted by other "distancing" mechanisms addressed in this chapter. For example, if users feel as if the virtual violence is really happening, but stay fully aware that it is not, they may not feel bad about shooting other opponents even in the absence of moral disengagement cues (e.g., unjustified violence against human-like victims). In line with this thinking, certain user traits may suffice in diminishing moral concern about virtual violent action, too. In two experimental studies conducted by Hartmann et al. (2010), for example, users scoring high on trait empathy felt guilty about shooting virtual victims in unjustified contexts; however, users scoring low on trait empathy felt significantly less guilty about it.

Moral Taboos: When Virtual Violence is Considered Inappropriate

Interestingly, even avid gamers report that they would deem specifically gruesome or violent behavior unacceptable in virtual environments. Lively debates raged on the Internet among avid gamers about morally problematic video game violence: particularly a mission in the popular *World of Warcraft* role-playing game that features torture, and an infamous mission in the popular first-person shooter *Call of Duty: Modern Warfare* 2, where the user engages in a massacre of civilians at a Russian airport. Many users

expressed their uneasiness about these two missions, and found that they tapped a taboo, whereas others suggested that anything is and should be possible in the virtual world. Taboos relate to unalterable behavioral axioms; something a person says s/he would never do, no matter what the circumstances (Gutierrez & Giner-Sorolla, 2007). Taboos are strongly rooted in a person's sacred values (Tetlock, 2003). Scientific research revealed that for many users taboos in the virtual world exist. For example, in an interview study conducted by Klimmt et al. (2006), users of violent video games reported that they would not enjoy shooting innocent people or children in a video game. In an unpublished interview study by Soto et al. (2010), even avid gamers reported that they felt irritated or even guilty when they had to kill two sleeping soldiers in a mission featured in *Call of Duty 4: Modern Warfare* that they played as a part of the study. Whitty et al. (2011) revealed additional taboos that users said they "won't do in pixels" (p. 268). A typical example was rape (see also MacKinnon, 2006).

All of these findings suggest that some violent behavior in video games is taboo for most users. Although further empirical examinations are necessary, it may be speculated that these activities stay a moral taboo even if one or all of the above-mentioned factors that potentially diminish moral concern are present. A seemingly real rape or torture of an innocent virtual character, for example, may be a taboo even for users scoring comparatively low on trait empathy that stayed fully aware of the mediated nature of the depicted violence, and even if the game "allowed" for such a behavior.

TV and Movie Violence: Moral Significance and Moral Disengagement Processes

So far, the discussion has focused on virtual violence depicted in video games. Indeed, the present approach originates from research on video games. However, this approach may also be applied to how users respond to violence depicted in other media contexts. In the past, many scholars have been concerned with the way users experience and judge violence depicted on TV or in movies (e.g., Hoffner & Levine, 2007; Sparks & Sparks, 2000). Accordingly, it seems reasonable to link the present approach to the rich theoretical corpus developed by these scholars. To this end, I will briefly discuss an application of the suggested dual-process approach of media realism to TV or movie exposure in a first step. In a second step, I will discuss how the suggested four mechanisms that potentially diminish users' moral concern about seemingly real violence may apply to the TV or movie context.

Experiential versus Rational Realism of TV and Movie Violence

It may be argued that the suggested pattern of experiential versus rational processing is not only typical for users' processing of video games, but of

most entertaining media content. Basically, the cognitive and motivational preconditions are highly similar across different media entertainment contexts: Users commonly encounter fast-paced and arousing action and are motivated to get immersed in the sensory illusion provided by the media technology. Accordingly, it is likely that experiential processing dominates over rational processing while users pursue entertainment fare. Consequently, users of violent TV films or movies may be prone to feel that the depicted violent action is "really happening." As a consequence, they may be inclined to find it morally significant and may start to morally judge it.

Abundant evidence for this assumption has been produced in studies linked to disposition theories (for an overview see Raney, 2003), especially in research linked to the disposition theory of drama and the moral sanction theory of delight and repugnance (Zillmann, 2000). According to these approaches, users constantly observe and automatically judge in terms of morality the behavior of mediated characters depicted on the screen. For example, while watching an action movie, users may feel outraged about violence inflicted upon innocent characters and morally condemn the perpetrators. That they do so appears to be so natural that little has been said in literature about why users actually perceive flashes of light on the TV or movie screen as social beings that would display morally significant behavior (Tan, 1994). However, in light of the dual-process approach to media realism discussed above, it may be argued that most television shows and movies provide sufficiently accurate representations of social beings. If they do so in the context of arousing and fast-paced entertainment fare, users are likely to process these representations experientially. Consequently, they may tend to temporarily perceive the characters as actual living beings, and they may start feeling like being in company of the characters depicted on the screen (Raney, 2004; Tan, 1994).

TV and Movie Violence: Why Do Users Not Feel Repelled?

Watching TV or movies profoundly differs from playing video games in that the users' self is represented in video games but not on TV or in movies (Lee, 2004; Tamborini & Skalski, 2006). Accordingly, users refer to virtual actions conducted by the main character of a video game as "their" actions, whereas onlookers attribute the displayed action to somebody else. In the context of violent action, this profound difference implies that video game users tend to feel like carrying out the violence themselves, whereas onlookers tend to say they only witnessed the violent action (Tan, 1994). Accordingly, self-conscious moral emotions like guilt may follow on from users' violent behavior in the context of video games, but they are unlikely to occur in the context of violent TV shows or movies. Therefore, the question why users do not feel repelled by TV or movie violence starts out from a different problem than the discussion of virtual violence. In the case of virtual violence, one

needs to explain why users do not feel bad about their own seemingly real violent actions. In the case of TV or movie violence, one needs to explain why onlookers do not feel repelled by witnessing "apparently happening" violence that is inflicted by somebody else on other people. Because users do not commit the violence on their own, TV violence differs from virtual violence in that guilt is an unlikely response. However, users may feel repelled by TV violence, because they find the portrayed violence morally disgusting (Tangney et al., 2007).

Onlookers may not feel repelled by TV and movie violence for the same reasons why they do not feel repelled by virtual violence. First, personality seems to matter. Abundant research shows, for example, that male viewers, individuals scoring lower on trait empathy, and those higher in sensation-seeking and aggressiveness enjoy TV or movie violence the most (Aluja-Fabregat, 2000; Hoffner & Levine, 2007; Sparks & Sparks, 2000). Other studies have shown that onlookers' propensity to morally disengage predicts acceptance of violence displayed by protagonists of violent movies or TV shows (Krakowiak & Tsay, 2011; Shafer, 2009). Similarly, one would also expect that more empathetic viewers feel more repelled by witnessing unjustified violence committed by the protagonist of a movie (e.g., like in the movie *Natural Born Killers*).

However, personality traits may be linked to the enjoyment of TV and movie violence in more complex ways. Raney (2002), for example, has shown that more empathetic users felt more sympathetic with a victim portrayed in a crime show, and, hence, enjoyed witnessing a violent punishment of the perpetrator more than others. This finding shows that a given personality trait, like empathy, may either foster responses that impede or contribute to enjoyment of TV violence. Normally, one would expect more empathic people to feel more repelled by portrayals of TV or movie violence. However, in Raney's study, more empathetic users may have perceived the initially displayed unjustified violence as more severe than other users and, thus, may have become more morally disengaged than others. Accordingly, they may have perceived the displayed violent punishment of the perpetrator as more justified and legitimate than others. Consequently, they may have felt less repelled by the violent punishment.

Second, onlookers may not feel repelled by witnessing seemingly real TV or movie violence because they believe that "this is not really happening." For obvious reasons, such rational beliefs are more likely to accompany exposure to fictional than non-fictional violence. But users have been shown to enjoy even the thrills and fears of depicted non-fictional violence (Cantor, 2009), probably because they feel protected by recalling that "this is not currently happening" in their living room (Andrade & Cohen, 2007).

Third, onlookers may not feel repelled by TV or movie violence because they perceive and accept it as part of a genre. This argument points out to the fact that viewers may differ in their interpretations of violence depicted on the screen (Riddle, Eyal, Mahood, & Potter, 2006). Raney (2004) argues

that viewers develop genre- or story-schemata that "guide expectations about and interpretation of the ongoing narrative and the characters involved" (p. 354). Accordingly, viewers that are familiar with a specific violent film genre (e.g., splatter movies) may feel less repelled by the depicted violence, because they perceive the violence through the lens of their activated genre schema and, thus, interpret it differently from somebody that is less familiar with the genre. More specifically, users being very familiar with a genre may be more prone to consider the violence a typical element of the genre and, thus, to accept it because it adheres to the implicit rules of the genre.

Fourth, and maybe most importantly, onlookers may not feel repelled by witnessing seemingly real TV or movie violence because they are morally disengaged and perceive the depicted violence as a legitimate action. Indeed, in many violent TV shows, and particularly in movies, violence is depicted as justified and consequences of violence are neglected or portrayed in distorted ways. A content-analysis of violent TV content by Potter and Ware (1987) revealed that 93 percent of the aggressive acts initiated by main characters were portrayed as justified. Another content analysis of prime-time TV content (Smith, Nathanson, & Wilson, 2002) showed that roughly 50% of the analyzed violent interactions lacked a portrayal of the harm or pain that usually results from violence (however, only 28% of all violent interactions were portrayed as justified).

Research related to the moral sanction theory of delight and repugnance (Zillmann, 2000; Zillmann & Bryant, 1975) provides ample evidence that (even empathetic) viewers readily accept (and even enjoy) the portrayal of (even harsh) violence against antagonists who presumably deserved it because they initially made a serious mistake. These findings suggest that witnessing a condemnable mistake results in a desire for and enjoyment of restorative punishment of the perpetrator.[4] However, viewers only enjoy the punishment to the extent they perceive it as fair; accordingly, punishments considered too harsh or too mild do not trigger enjoyment. Raney (2004, 2005) highlights that viewers' acceptance of seeing media characters being punished may not only result from a desire to see justice restored. Rather, whenever viewers take sides in a conflict portrayed in a TV show or movie, they may be prone to see violence enacted against opposing people or groups as legitimate. This argument resembles the core idea of disposition theories in general, according to which people are empathetic with others they like, and, hence, enjoy witnessing beneficial outcomes for these individuals. But they are not empathetic towards others they dislike, and, therefore, may even enjoy witnessing detrimental outcomes for these individuals (Zillmann, 2000).

Conclusion

The present chapter discussed why many video game users judge virtual violent behavior to be morally sound, why they do not feel repelled by it, and why they often enjoy it. This discussion was also extended to the

question of why TV and movie users often enjoy depicted violence rather than feeling repelled by it. The present approach started out from the idea that video game users, while playing, interpret the content based on two parallel processing modes: an experiential mode and a rational mode. Experiential processing may result in a feeling of apparent reality (i.e., that the encountered game-play is actually currently happening). In contrast, based on parallel rational processing, users may find it still unlikely or implausible that the observed action would actually happen, and, thus, may dismantle their experience as a media-based illusion. However, both cognitive and motivational factors speak for a dominance of the experiential mode over the rational mode while users engage in the heat of the game-play. Accordingly, video game users may be prone to subdue to the illusion of violent action and may take it as "seemingly real." This would imply that they do not perceive video game characters (i.e., their potential victims) as

Table 6.1 Why do users not feel repelled by seemingly real violence? Summary of mechanisms that protentially diminish users' moral concern and associated moral feelings linked to virtual violence in video games or to media violence on TV or in movies.

Mechanism		*Example*
Video games	*TV/Movies*	
Individual traits	Individual traits	Individuals scoring low on trait empathy feel barely moved both by their own violent action in video games and by witnessing violent action of a protagonist on the TV or in a movie.
"Just a medium"	"Just a medium"	Although the violence feels intuitively real to users, as if it was actually currently happening, they stay cognitively aware that it is just an illusion induced by a technology-based representation of reality.
"Part of a game"	"Part of a genre"	Similar to sports, video game users consider their virtual violence action as fair because it adheres to the rules of the game. They may also re-frame their actions as necessary instrumental behavior ("to advance to the next level, I have to get rid of these opponents"). TV or movie users may re-frame depicted violence as a typical and thus acceptable element of a genre (e.g., in splatter movies).
Moral disengagement cues	Moral disengagement cues	Video game users shoot virtual characters for justified reasons (e.g., "to save the world"). The game-play disregards the consequences of the violent action or displays them in a distorted way. Moviegoers watching a drama take sides for the hero that needs to save the world and, thus, accept his violent behavior.

"pixels on the screen" or as artificial objects, but tend to perceive them as autonomous agents that follow a mind of their own and, therefore, even deserve proper moral treatment. Accordingly, the present approach set out from the assumption that virtual violence tends to be genuinely morally significant.

However, despite this presumed moral significance, video game users may not feel repelled by engaging in virtual violence. The present approach discussed four factors that may explain why moral concern about seemingly real video game violence is diminished in users (for an overview see Table 6.1). Summarizing those four factors, one would expect the strongest levels of moral concern and related feelings of guilt or moral disgust (and probably the lowest levels of enjoyment) among violence-avoidant individuals (e.g., females, strong trait empathy, strong internalization of prosocial norms) who engage in virtual violence in the absence of moral disengagement cues (e.g., unjustified virtual violence against innocent humanlike characters), and to whom the depicted violent action not only feels real (based on experiential processing), but who also find it plausible and likely that such violent action is really happening (based on rational processing), and who do not tend to interpret the violent action a "part of a game" or as being in line with game rules.[5]

Although such expectations may seem plausible, they need to be further empirically substantiated. The present approach dwelled on a rich pool of empirical studies, but, to date, only a handful of studies have started to systematically explore how users perceive virtual violence, how they experience, think, and feel about it. Research on how users morally judge virtual violence, and when they condemn or enjoy it, is still in its infancy. In addition, knowledge about the social perception of video game characters needs to be extended. For example, more knowledge is necessary about the moral status of video game characters, and, consequently, the moral significance of harm inflicted upon those characters. From the subjective perspective of a user, virtual violence against video game characters may be positioned somewhere in the middle of a moral continuum between kicking a dead object like a stone and kicking a living object like another person (Kwan & Fiske, 2008). With ever more realistic media environments, users may tend to perceive the depicted violence as morally more significant.

An illumination of how users perceive and experience virtual violence promises to contribute to important strands of research, such as aggression or entertainment research. It is particularly interesting to examine if users adapt the way they perceive violence in the real world to the way they perceive media violence. For example, it may be that users also tend to morally disengage in the real world based on frequent moral disengagement in violent video games. Greitemeyer and McLatchie (2011), for example, found that playing violent video games increased dehumanization (a moral disengagement mechanism), which in turn evoked aggressive behavior. Although this was not tested in their study, it may be that users dehumanized seemingly real opponents during their violent game-play, and, therefore, tended to dehumanize others afterwards. The time seems ripe to pay more systematic attention to this topic.

Notes

1 In his approach, Hartmann (in press) dwells on cognitive-experiential self-theory (CEST), because this theory closely links information processing to people's construction of reality. Therefore, CEST seems to provide a good conceptual basis to sketch the way people construct media reality. However, alternative and closely related dual-process approaches to information processing exist that may be equally well suited to explain how media illusions are shaped by users' information processing, particularly Sloman (2002), Smith and deCoster (2000), and Deutsch and Strack (2006).

2 In a deeper sense, experiential processes seem to be blind towards media illusions. The reason is that an illusion is a rather abstract, language-based concept. To identify something as an illusion requires that one activates the concept of an illusion, which seems to be an operation typical of rational processing. Accordingly, illusions do not exist in the experiential system: Everything is perceived as real that sufficiently matches the sensory stimulation of a memorized object or entity. Within the experiential system, the natural display of a human being gazing at you feels like a human being gazing at you. Only within the rational system that allows for abstract reality are users able to tag this sensation as an illusion.

3 It should be stressed that experiential processing alone does not suffice in evoking a feeling of apparent reality. Rather, users have to experientially process natural media representations, that is depictions whose sensory stimulation pattern resembles the pattern that has been commonly associated with a memorized object or entity. Despite experiential processing, a media environment that does not feature such a sensory stimulation may not feel real to the users' senses, however, and, thus, may be considered artificial (see also Slater, 2009). In the context of video game violence, it may be unlikely that users attach much moral significance to the game-play in this case. An example would be the shooting of aliens in old arcade games like *Space Invaders*. But even contemporary video games are far from contemporary high-end virtual environment systems, let alone a perfect simulation of reality like *Star Trek*'s Holodeck. In contrast to these highly immersive systems, most contemporary video game technology only provides visual and auditory feedback and allows for a comparatively artificial user input. Accordingly, even contemporary games frequently include depictions that do not feel real to a player's senses. However, it appears to be a trend that video game technology provides ever more natural representations of reality (across various sensory channels; e.g., Xbox Kinetic, Wii 2). Accordingly, we may also expect a trend that users increasingly feel like the things depicted in video games were real.

4 It remains an open question what users exactly enjoy when they witness that justice is restored by harming the perpetrator. Do they enjoy that the principle of justice is restored or do they enjoy the justified enactment of violence? Experimental comparisons may be conducted in future studies that compare both mechanisms and examine users' enjoyment of equally "thorough" justice restorations that are either based on violence or non-violent measures.

5 It is a more difficult question how the suggested four factors contribute to enjoyment. One answer has been suggested in the present chapter: all four mechanisms may diminish user responses (like guilt or disgust) that likely impede enjoyment. However, some of the four mechanisms may simultaneously affect responses that contribute to enjoyment, too. For example, if users recall intensively that "this is not real," they may not only suppress moral concern but also reduce the informative value of the depicted violence. Accordingly, they may also suppress contributing factors, like feelings of competence. It may be that users strive for an optimal balance so that the violence feels real enough to be informative and exciting, but also unrealistic enough to be easily coped with. Personality traits may moderate this effect. For example, in the context of virtual violence, more sensitive, empathetic, violence-avoidant people may prefer violence, if at all, that appears very artificial and unrealistic (e.g., *Super Mario World*). Under these conditions their responses contributing to enjoyment may outweigh their impeding responses. For the same reasons, less sensitive, less empathetic, and more violence-approaching people, in turn, may prefer more realistic settings (e.g., a three-dimensional WW2 first-person-shooter).

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